# International Member Regional Update Australia

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#### **Presentation Outline**

- Australia's move to a Dynamic Datum;
- Continuing Evolution of Precise Positioning;
- National Positioning Infrastructure ~ SBAS Trial;
- IGNSS 2018, Sydney, February 2018.







Video on Modernising Australia's Datum

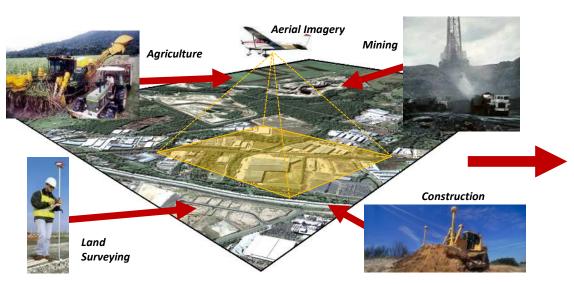
Available at: <a href="https://vimeo.com/191566518">https://vimeo.com/191566518</a>





#### **Continuing Evolution of Precise Positioning**

## Accelerating development of Satellite positioning technology and applications











#### **Smartphone Positioning is Evolving Quickly**



**GNSS** mobile apps: using Nougat to access raw GNSS measurements

Published: 01 December 2016



The ability to access GNSS raw data on Android devices opens up a range of possibilities and opportunities.

The ability to access raw GNSS measurements opens up a range of opportunities for mobile app developers, but how do you access the data? During the first European GNSS Agency (GSA) Galileo Hackathon at the Where Camp 'unconference' in Berlin Dr Lukasz Bonenberg from the University of Nottingham explained how app-developers can access raw GNSS measurements on smartphones via the latest release of the Android operating system.

Source: GSA, 2016, www.qsa.europa.eu/newsroom/news/gnss-mobile-apps-using-nougat-access-raw-gnss-measurements











Dual-frequency receiver and dual processor in Broadcom's new L1/L5 chip.

Source: GPS World September 2017



#### PPP WizLite

**Precise Point Positioning** for smartphones based on algorithms from the French Space Agency



Google Play

Source: Google Play, Early 2017

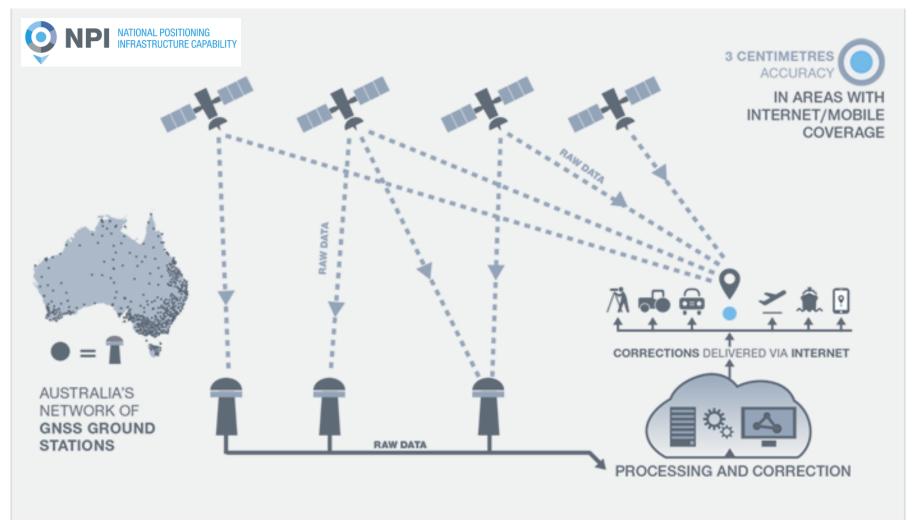
**Next version of Android will** support true multi-constellation multiple frequencies (L1 and L5) and a jamming detector

Source: GPS World May 2017





#### **National Positioning Infrastructure (NPI)**

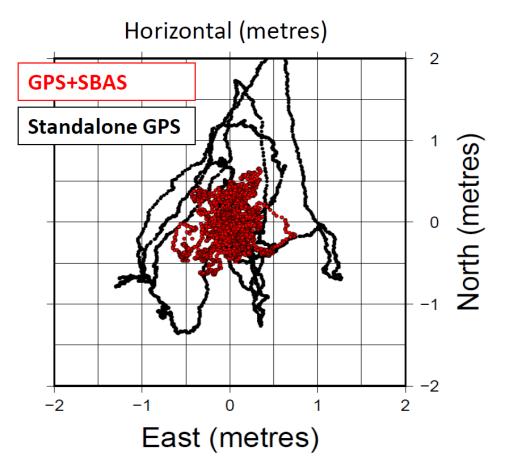


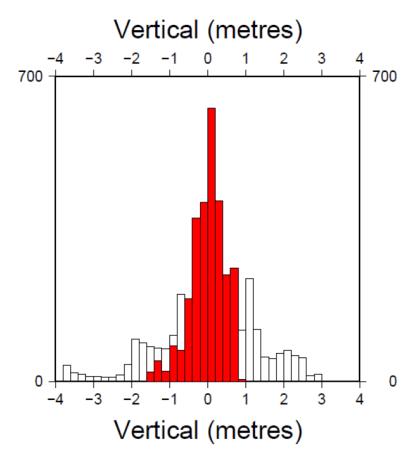


Source: Geoscience Australia



### **SBAS Trial Performance (L1 Geo)**







Source: Dawson, GA ~ Presented to NPI-AB October 2017

- Also Dual Frequency Multi-Constellation;
- and PPP Service



#### **IGNSS 2018**

Sydney, Australia 7 - 9 February 2018 www.ignss2018.unsw.edu.au









